

*Critical Areas*

Table II-4. Spawning Criteria of Striped Bass within the Albemarle-Pamlico Estuarine System Study Area

Location:

ROANOKE RIVER - River Mile (RM) 78-137, centered at Weldon (RM 130) at Fall Line (Hassler et al. 1981).

TAR RIVER - 55.6 to 148.2 km upstream from river mouth; 75% within a 37-km area (Humphries 1966); RM 50 to RM 85 (Humphries 1966; Kornegay and Humphries 1975); Falkland bridge upstream for 80 km (Miller 1975). Flakland to above Tarboro, with most between Falkland and Tarboro in 1988 (dry spring) (K. Nelson, pers. comm.).

NEUSE RIVER - Middle Neuse from NC HWY 55 bridge near Kinston (RM 80) to the SR 1224 bridge above Goldsboro (RM 145). Major area: NC HWY 55 bridge to SR 1915 bridge near Goldsboro (Hawkins 1979). Spawning in 1989 from Seven Springs (RM 105) to above Goldsboro (RM 145+) with most above Goldsboro; 1989 was a wet spring (K. Nelson, pers. comm.).

Season:

ROANOKE RIVER - April 15 to June 5; peak May 10-20 (Hassler et al. 1981).

TAR RIVER - April 15 - May 15 (Humphries 1965); mid-April to mid-May; peak late April to early May (Miller 1975). In 1973, April 21- May 14; in 1974, April 28-May 17 (Kornegay and Humphries 1975).

NEUSE RIVER - Late March to late May (Hawkins 1979); April through mid-May (Baker 1968).

Temperature:

ROANOKE RIVER - 13°C to 21.7°C; peak 16.7°C-19.4°C; 90% of spawning between 15.4°C and 20.3°C (Shannon and Smith 1968; Shannon 1970; Street 1975; Hassler et al. 1981).

TAR RIVER - 15.0°C-22.2°C, peak 18.0°C-21.0°C (Humphries 1965); 19°C-21°C, peak at 19°C-19.5°C (Miller 1975).

NEUSE RIVER - 13.5°C-24°C; peak 20°C-21.5°C (Hawkins 1979).

Habitat:

ROANOKE RIVER - main open water area of river up to the Roanoke Rapids dam in wet years, water highly sedimented and turbulent (Rulifson).

TAR RIVER - main river channel, primarily sand substrates (K. Nelson, pers. com.)

NEUSE RIVER - main river channel, primarily sand substrates (K. Nelson, pers. com.).